

REMARKS

Claims 1-3, 5-9, 14-18, and 21, 22, 25, and 26 are pending. The pending claims stand rejected under 35 USC 112, first paragraph, as set forth in sections 1 and 2 of the Office Action, and under 35 USC 112, second paragraph, as set forth in sections 3 and 4 of the Office action. These rejections have resulted from use of the “sideways angle” limitation, as explained in the Office Action.

Independent claims 1 and 14 are amended herein to alleviate any confusion as to the nature of the claimed angles of the air jets. The independent claims call for the discrete jets of air to be at a downward angle with respect to a horizontal plane and a non-parallel angle with respect to a machine direction (MD) of the nonwoven web. This amendment is clearly supported by the original specification, and distinctly claims the invention.

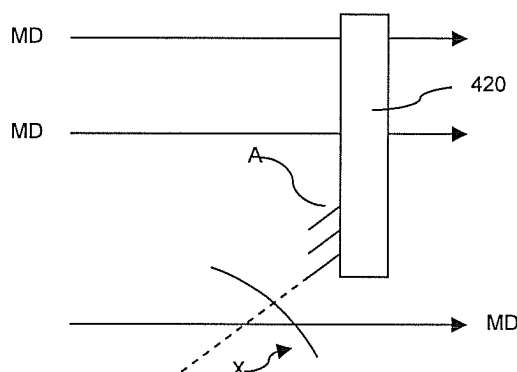
At page 14, line15, through page 15, line 15, of the original specification, the angular orientation of the air jets is described as follows:

In certain embodiments, the desired fiber orientation may be achieved by having the jet holes 320 (FIG. 3) oriented to produce air jets which are directed substantially perpendicular to the flow path of the fiber stream exiting the fiber drawing unit 70 (FIG. 1). Generally speaking, the fiber stream will be traveling in a vertical path toward the foraminous forming surface, ***so where the air jets are directed substantially perpendicular to the flow path of the fiber stream the air jets will be directed substantially in the machine direction and substantially parallel to the horizontal plane.*** However, depending on desired fiber orientation, ***it may also be desirable to have the air jets directed at an angle with respect to the machine direction. For example, the air jets may be directed at an angle with respect to the machine direction of up to about 60 degrees, or more.*** Furthermore, it may be desirable to have the air jets directed at an angle with respect to the horizontal plane, that is, the air jets may be oriented at an upward or downward angle of up to about 60 degrees.

In certain embodiments combinations of angles may also be desirable, such as ***where the air jets are directed at an angle with respect to the machine direction and also directed at an angle with respect to the horizontal plane.***

Furthermore, although not shown in the process of FIG. 1, it is desirable to employ more than one non-contacting deflector, that is, to use two non-contacting deflectors as opposed pairs as is illustrated in FIG. 4A and FIG. 4B. In FIG. 4A, a pair of non-contacting deflectors, in this case paired air jet deflectors 410 and 420, are shown in top view. The air jet deflectors 410 and 420 are similar to the air jet deflector which was depicted in FIG. 3 and are punctuated by a series of jet holes (FIG. 3) which are drilled or otherwise formed in the air plenums. The dashed lines A and B illustrate the air jet flow paths during operation of the air jet deflectors. **As shown in FIG. 4A, the air jet flow paths are oriented at about a 45 degree angle with respect to arrow MD which represents the machine direction (direction of material production).** A side view of a pair of air jet deflectors is shown in FIG. 4B. For the embodiment shown in FIG. 4B, the air jet flow paths during operation of the air jet deflectors are oriented at about a 45 degree downward angle with respect to the horizontal plane (arrow E). The air jet flow paths are illustrated by dashed lines C and D, respectively, for air jet deflectors 460 and 470. (emphasis added)

As explained above, the fibers travel in a vertical path and are deposited onto the forming surface, which runs in the machine direction (MD) below the deflectors. Fig. 4A, is a top view of the deflection devices. The vertical flow path of the fibers through these devices **is in the plane that is perpendicular to the page.** The fibers are deposited onto a forming surface that moves below the devices in a direction represented by the lines "MD." The dashed lines "A" and "B" in Fig. 4A represent the angle of the air jets with respect to the MD line of direction. The air jets define a non-parallel angle "X" with respect to this line, as illustrated in the diagram below:



The non-parallel angle "X" is different than the downward angle (with respect to horizontal plane E) of the jets depicted by dashed lines "C" and "D" in Fig. 4B.

Applicant respectfully submits that the present amendment places the application in condition for allowance and is thus proper in view of the Final Office action. The amendment is meant to only alleviate confusion and indefiniteness caused by use of the term "sideways angle", and does not present new matter or issue for consideration. The previous prior art and provisional double patenting rejections have been withdrawn, and thus the Examiner has obviously already considered the merits of the amendment.

With the present Amendment, it is respectfully submitted that all pending claims are allowable and that the application is in condition for allowance. Favorable action thereon is respectfully requested. The Examiner is encouraged to contact the undersigned at his convenience should he have any questions regarding this matter or require any additional information.

Respectfully submitted,

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